



Forest Resources and Technologies (FOREST) Project

Cooperative Agreement Number 118-A-00-00-00119-00

Quarterly Report

July 1, 2004 – September 30, 2004

Submitted to

**United States Agency for International Development
Moscow, Russia**

Submitted by

**Winrock International
Chemonics International Inc.
The Heron Group, LLC**

This report was made possible by a grant from the United States Agency for International Development through the Moscow-funded Forest Resources and Technologies Project.

Table of Contents

I.	Introduction.....	2
II.	Quarter Highlights.....	2
III.	Four Technical Components	4
A.	Fire Prevention.....	4
B.	Pest Management	7
C.	Non-Timber Forest Products and Secondary Wood Processing.....	17
D.	Renewable Energy Alternatives/Biomass	24

I. Introduction

Winrock International, in partnership with Chemonics and the Heron Group, was awarded the Forest Resources and Technology (FOREST) Project on July 21, 2000. This five-year project is based in Khabarovsk, Russia and will be implemented July 2000 - July 2005 in the Russia Far East and Siberia. The major goals are to reduce the threat of global climate change and preserve biodiversity by promoting sustainable forest management and preserving Russian forests as a globally important carbon sink and critical habitat for rare and endangered species.

The FOREST project is achieving these goals by focusing on four technical components: forest fire prevention, pest management, non-timber forest products and secondary wood processing, and renewable energy alternatives. In addition to the four primary components, three crosscutting components (forest policy and legal reform; applied forestry research; and a grant/loan program) will support the technical components.

This report covers the 1st quarter of Year 5 of the FOREST Project – July 1, 2004 to September 30, 2004.

II. Quarter Highlights

- Visit of U.S. Ambassador to Russia Alexander Vershbow to FOREST Krasnoyarsk. During informal discussions with students and representatives of ecological organizations (NGOs) involved in environmental protection and fire prevention, Ambassador Vershbow stressed the importance of general awareness campaigns to prevent forest fires and conserve the region's natural resources.
- Modification of the FOREST project's fire prevention school program conducted in all project areas. Methodologists and wildfire specialists are working on the school program for Khabarovsk, and education specialists from the Pedagogical Institute who are promoting the program in Krasnoyarski Krai are having a significant impact. In accordance with the regulations of the Russian education system, the program is taught over 34 hours, features lectures and practical classes, and introduces new testing and evaluation criteria.
- Federal Agency for Geodesy and Cartography Approve Publication of Project Maps. Forest protection maps for Primorskiy Krai and Sakhalin Island successfully passed a technical review by experts at the Federal Agency for Geodesy and Cartography ("Gosgeonadzor") in Khabarovsk. The governmental experts approved the high professional quality of both maps. Local forest administrative offices already have requested one thousand copies of each map for distribution in each forestry region.
- Pest Monitoring System Institutionalized in Siberia and the Far East. The Centers of Forest Protection in Tomsk, Irkutsk, and Sakhalin Oblasts, Krasnoyarsk, Khabarovsk, and Primorskiy Krai have institutionalized the trapping methodology developed by the

Project in 7 subjects of the Russian Federation. Employees of the Centers placed pheromone traps to monitor Siberian moth in six hundred and seventy thousands of square kilometers in 120 leskhoses this summer. All work is done on a share cost basis. Thirty percent of the total effort (i.e. sampling for larvae) is covered by the Centers.

- A FOREST volunteer has provided assistance in establishing 8 stationary and 20 mobile NTFP collecting centers in six districts of Krasnoyarsk territory. There will be at least collection centers in each district. He also developed transportation and financial outlines for the use of NTFP resources to assist member companies. His recommendations will increase the number of collection centers, expand the borders of harvesting areas and will allow for increasing the volume of sustainably harvested and processed NTFPs.
- A seminar entitled Practical Application of Regulations on the Usage of non-timber Vegetative Resources in Khabarovsk Krai sponsored by the FOREST Project has took place on August 10, 2004. With FOREST support 41 managers of NTFP harvesting companies received training in harvesting NTFPs in a sustainable manner with minimal damage for environment and habitat of commercial species. This training was required due to the recently introduced regulations by the Governor of Khabarovsk Krai – specifically in reference to the use of non-timber vegetative resources in Khabarovsk Krai, developed with assistance of the FOREST Project. FOREST also sponsored production of 500 copies of new rules that have been immediately issued to seminar participants.
- Ten people representing three SWP Associations and the Ministry of Forest Industry of Sakhalin Oblast and Khabarovsk Krai participated in Lesdrevmash trade show held in Moscow. The delegates had a great opportunity to learn modern wood processing and kiln drying equipment, meet with highly professional specialists in different areas of the forest industry sector, and also share their experience and information with the delegates. A FOREST Project consultant conducted analysis of the secondary wood processing equipment presented at the trade show. He presented his assessment and recommendations to SWP companies of the RFE and Siberia, so they could make more efficient decisions in purchasing required SWP equipment to modernize their production facilities. As a result of their attendance this national trade show representatives of Ministry of Forest Industry of Sakhalin Oblast and Khabarovsk Krai received a clear understanding of new SWP technologies and equipment existing in the market. They now are expected to develop a strategy to modernize and develop the industry in their regions working closely with local companies.
- Dynasty Co was assisted by FOREST volunteer Jared Knight in updating the market analysis on glued finger jointed wood panels. Jared also assisted Voyage as a volunteer in 2002 and helped in developing the original (now implemented) business plan on launching new production – wood panels. Voyage Co implemented all the steps as indicated in business plan and had grand opening for manufacturing edge glued panels which Jared was able to attend.

- Igirma-Tairiku (Irkutskaya Oblast), a long-standing FOREST partner, purchased a third 6.5 MW Biysk biomass boiler. The boiler will be installed in November 2004 to complement the two Biysk boilers the company previously installed with FOREST technical assistance. The first two boilers, the first of its kind in the region to be able to efficiently burn bark, already serve as models for other companies. This facility has enabled the company to put into operation 12 Finnish TEKMAWOOD dry kilns (180 m³ each) and boost the company's exports by up to 150,000 m³ in high quality dry lumber exports to Japan, Austria, and Germany, with an estimated profit of over three million USD/year.
- With FOREST's technical and financial assistance, partner company TM Baikal (Irkutskaya Oblast) has modified the design of two KE-10-14 (6.5 MW each) Bisyk boilers. The company plans to begin assembling the first boiler in November 2004. This facility will enable the company to increase its dry lumber production from 7% to 80%, producing 115,000 m³ of dry lumber per year. The company is expected to earn \$3.5 million USD per year from added value dry lumber.

III. Four Technical Components

A. Component 1 – Fire Prevention

1. Overview

In the third quarter of 2004, the Forest Fire Prevention and Public Education (Fire Prevention) Component moved closer to its goal of institutionalization through information exchange and collaboration with forestry agencies and organizations. The Fire Prevention Component worked closely with governmental and nongovernmental partners, including the Federal Forestry Agency, through roundtable discussions, seminars, and direct technical assistance to design and carry out forest fire prevention public awareness campaigns. The Fire Prevention Component also partnered with specialists from the Federal Forestry Agency to further develop a public awareness campaign "how-to" manual.

The Fire Prevention Component continues to work with officials from the Ministry of Education in Khabarovsk Krai to modify the curriculum for school-age children. From July to September 2004, Fire Prevention Component staff conducted five educational trainings and three roundtable meetings to discuss public awareness activities and the forest fire prevention school program. The project also helped the Far-Eastern Regional Center of Forest Fire Prevention and Suppression to establish an information center in Khabarovsk Krai.

2. Highlights

Forest fire prevention education program for school-aged children

- *Festival of International Partnership Achievements in Khabarovsk, July 1, 2004.* The FOREST project's exhibit featured the newly revised fire prevention education program for school-aged children. School teachers and journalists were interested in the program, asking how and where to obtain it.

Awareness programs and institutionalization

- ***Visit of Taylor Roogles, U.S. Department of State, to Sakhalin Island.*** Mr. Roogles attended a high school ecology lesson in Yuzhno-Sakhalinsk, and participated in activities promoting the appropriate use of forest resources.
- ***Seminar on “Roles and Objectives of the Public in Forest Fire Prevention,” Khabarovsk, July 20 - 21, 2004.*** Seminar participants discussed involving the population in forest fire prevention campaigns, and developed recommendations to improve the capacity of the Federal Forestry Agency to carry out awareness campaigns.
- ***“Practical Manual for a Sustainable Public Awareness Program,” September 23, 2004.*** A team of authors reviewed comments and suggestions provided by the manual’s reviewers. The final version of this document will be presented to the Ministry of Natural Resources at a seminar in November 2004.
- ***Seminar entitled “Let’s Keep the Forest Alive.”*** 470 children from Krasnoyarski Krai, Khakassiya, Tuva, Tomsk, and Irkutskaya Oblasts participated in a fire prevention seminar. Activities included contests, quizzes, exhibitions, seminars, and games.
- ***Tiger Day, Khabarovsk Zoo, September 25, 2004.*** One hundred visitors took part in quizzes and answered fire prevention questions. The event was organized by the Fire Prevention Component, the Forest Service, the Khabarovsk Wildlife Foundation, and the Forest Journalists Club. Guests were told about the importance of the forest, and how it is crucial to the Amur tiger’s existence.
- ***Public service announcements on fire prevention.*** I.E. Chestin, director of the World Wildlife Fund (WWF) in Moscow, applauded the public service videos developed by the Fire Prevention Component and offered to distribute the materials to all regions where WWF activities are conducted.

NGO Partnerships

- ***Seminar on “Involving Indigenous Peoples in Forest Fire Prevention,” Khabarovsk.*** Indigenous peoples and the District Association of Indigenous Peoples took part for the first time in a forest fire prevention seminar. Twenty-one seminar participants received information about the activities of the Fire Prevention Component.
- ***“Engaging Local Communities in Forest Fire Prevention Campaigns” and “Conducting Effective Forest Fire Prevention Campaigns.”*** Participants included representatives from local forestry agencies, non-commercial organizations, mass media, and environmental NGOs. 109 participants attended the seminars.
- ***“Let’s Keep the Forest Alive” at the Krasnoyarsk Regional Scientific Library on September 17, 2004.*** As part of Forestry Day, a public awareness campaign was conducted at the Krasnoyarsk library with the help of the FOREST Project, the Center of Forestry Protection, and Siberian State Technological University. More than 40 students from institutes and secondary schools visited the ecology department of the library. The students learned about the efforts of different forest fire prevention agencies, and how to conserve and multiply the natural resources of Siberia.

Results

- ***Two new recreation zones.*** At Miniski leskhoz, Krasnoyarski Krai, four recreation zones built with FOREST Project support in 2003 are now open to the public.

- *Fire prevention souvenirs from the FOREST Project given to schoolteachers for use in their classrooms.* The Fire Prevention Component distributed more than 500 T-shirts, posters, banners, and stickers to help children learn about forest fire prevention.
- *The Information Bulletin.* Two thousand FOREST Project partners received Information Bulletin ? 9.

3. Success Story

Involvement of the Local Population in Forest Fire Prevention

General Awareness Campaigns

A seminar entitled “Involvement of the Local Population in Forest Fire Prevention General Awareness Campaigns” was held for Junior Forest Ranger Team Leaders in Khabarovsk from 3 to 5 August. This was the second initiative implemented by the FOREST Project in cooperation with the Russian National Environmental Protection Society; this time, the Society volunteered to pay a portion of the cost. During the seminar Junior Forest Rangers Team Leaders learned about the ecological consequences of forest fires and were taught the basic organization and key principles of general awareness campaigns. The FOREST Project’s former partner, Alliance, presented the best practices of public awareness campaigns in Komsomolsk city. The seminar’s most important interaction occurred during discussion of small public awareness campaigns; participants were very interested in and enthusiastic about developing such campaigns. The Junior Forest Rangers Team Leaders also showed great interest in various mechanisms for interacting with local authorities, State Nature Conservation agencies, and the media. Overall, the seminar was a great success.

4. Project Focus Areas – Activity Information

Ongoing activities:

- Finalizing the how-to manual on conducting fire prevention public awareness campaigns
- Establishing contacts with 21 NGOs and 24 schools and state institutions
- Creating an information center in Khabarovsk
- Opening a new recreation zone in Krasnoyarski Krai

Upcoming activities:

- A training seminar for librarians in Khabarovsk on establishing libraries as centers of ecological information and awareness is scheduled for October, 25, 2004.
- A seminar on “Involvement of the Local Population in Forest Fire Prevention General Awareness Campaigns” will be implemented with the Russian National Environmental Protection Society on October 20, 2004, in Khabarovsk.
- The workshop “Public Awareness Work of Forest Fire Prevention and Suppression with the Federal Agency of Forestry: Lessons Learned and Objectives,” hosted by the Ministry of Natural Resources, will take place on November, 3, 2004 in Moscow.
- The training seminar “Involving Indigenous Peoples in Forest Fire Prevention” will be held in Krasnoyarsk, November 2004.
- A study tour to the United States for those in charge of forest fire prevention activities, including specialists from the Federal Forestry Agency, will take place from November 6-16, 2004.

5. Results by Objective (Indicators)

Table: Forest Fire Prevention Results as per USAID/Russia's Strategic Objectives

Fire Prevention Component Indicator	Previous Indicator	Total
1.6.5 (3) Number of groups participating in Forest Fire Prevention Education Communication Programs	706	753
1. NGOs	43	64
2. Population groups	52	52
3. Mass media	63	63
4. Schools, organizations, extracurricular education institutions	425	451
5. Leskhozoes	123	123

6. Key Deliverables Accomplished Per Approved Work Plan

- Prepared a third version of the manual on how to conduct a fire prevention public awareness campaign
- Finalized the modified fire prevention education program
- Continued progress on the web site for the Khabarovsk Information Center
- Implemented five training seminars for NGOs and other organizations working on forest fire prevention

7. Notifications – Questions, Problems, Findings, Personnel Changes

The Fire Prevention Component will continue to develop the how-to manual on conducting a fire prevention public awareness campaign in collaboration with project partners and stakeholders in Krasnoyarsk and Khabarovsk Krai.

The following personnel joined the Fire Prevention Component team during the third quarter:

Tatyana Markova, Representative—Irkutsk
 Maxim Isaakov, Representative—Yuzhno-Sakhalinsk
 Irina Cheplyanskaya, Representative—Moscow
 Olga Vert, Assistant Representative—Krasnoyarsk

B. Component 2 - Pest Management**1. Economic Overview**

A report on evaluation of economic losses caused by Siberian Moth was published in the journal "Lesnaya taksatciya i lesoustroystvo", (2003, N 1, pages 138-142) a report prepared by a team of the FOREST Project consultants. The team was able to show for the first time that during a Siberian moth outbreak of 1994-1997 Krasnoyarski Krai suffered a loss of timber worth approximately 1.5 billion Rubles. If the monitoring system developed by this project had been available at that time, there is little doubt that much of this loss could have been avoided.

2. Highlights

- **Pest Monitoring System Institutionalized in Siberia and the Far East.** The Centers of Forest Protection in Tomsk, Irkutsk, and Sakhalin Oblasts, Krasnoyarsk, Khabarovsk, and Primorskiy Krai have institutionalized the trapping methodology developed by the Project in 7 subjects of the Russian Federation. Employees of the Centers placed pheromone traps to monitor Siberian moth in six hundred and seventy thousands of square kilometers in 120 leskhoses this summer. All work is done on a share cost basis. Thirty percent of the total effort (i.e. sampling for larvae) is covered by the Centers.
- **Government Agencies in Far East Collaborate with FOREST to Produce Forest Protection Map.** The Far East Pacific Institute of Geography, Far Eastern Branch, Russian Academy of Science in Vladivostok is a leading map developer in Primorskiy Krai. The Institute was extremely interested in results of the FOREST project work on creation of a map on forest pathology of the Krai. Consultants in the Project, including the leading forest entomologist of the Far Eastern Forest Management Institute Dr. Galina Yurchenko developed the plan for the main map including cartographic and table inserts. The Institute expressed its interest in collaborating with the Project to finish this map. For this reason, they donated detailed forest type information and provided, without charge, a professional Geographic Information Specialist (GIS) specialist to complete the final version of the map and prepare it for printing. This is another outstanding example of FOREST project collaborating with different governmental organizations for mutual benefit, most specifically protection of Russia's forest resources.
- **Pest Monitoring Working Group Recommends Approval of Year 5 Work Plan to Insure Institutionalization.** The eighth meeting of the Working Group of the Pest Monitoring Component met in Yuzhno-Sakhalinsk. Members of the Working Group recommended approval of the Component's Year 5 Work Plan. The leaders of the Russian Forest Protection Service, Drs. L. Matusevich and M. Kobel'kov expressed their satisfaction with results obtained in Year 4. WG members mutually agreed with the main tasks of the plan and recommended that work be continued in Year 5 to insure institutionalization of Project results.
- **Federal Forest Management Agency Institutionalizing FOREST Project Results.** The Department of Forest Protection, Forest Management Agency, Ministry of Natural Resources has expressed considerable interest in achievements made in forest protection in the FOREST Project. In a recent meeting, Albert Kasparov, the new Department Head, proposed including the main activities of the Pest Monitoring Component in the 2004-2005 work plan of the Agency for mutual implementation on a cost share basis.
- **Pheromone Trap Refinements Published.** A team of FOREST Project consultants prepared a report on refinements to the pheromone trap for Siberian moth. The authors published the in the Russian journal "Lesnoye Khozyaistvo", 2004, N 3. The team was able to find the optimal construction of the trap to facilitate moth sampling of this major pest of Russian forests. The redesigned trap is now produced by a private company "Print" in Krasnoyarsk. The article in the popular practical forest journal will attract

further attention to pheromone monitoring of Siberian moth and will facilitate institutionalization of the new monitoring methodology developed by the FOREST project.

- **FOREST Project Results Highlighted in Siberian Forestry Forum.** A Russian forestry forum held an All-Russia Conference on “Structure, Function and Organization of Forest Ecosystems” in Krasnoyarsk. This Russian forestry forum brought together 250 participants from all over the country. The conference commemorated the 60th anniversary of the oldest Russian academic forest institute – the V.N.Sukachev Institute of Forest. Three plenary presentations focused on results of the FOREST Project, two of them – specifically on the Pest Monitoring Component. All three papers will be published in the conference Proceedings.
- **Siberian Moth Monitoring to Have Federal Support Next Season.** The Centers of Forest Protection in Tomsk, Irkutsk, and Sakhalin Oblasts, Krasnoyarsk, Khabarovsk, and Primorskiy Krai have institutionalized the trapping methodology developed by the Project in 7 subjects of the Russian Federation. Employees of the Centers completed pheromone monitoring of Siberian moth populations in six hundred and seventy thousand square kilometers in 120 leskhoses this summer. All work was done on a share cost basis, with the Centers providing funding for 30% of the total effort (i.e. sampling for larvae). Next year the Federal Agency of Forest Management will fund this activity.
- **Existing Russian Forest Protection Organization Survives Insuring Institutionalization of FOREST Project Results.** Pest Monitoring Coordinator Yu. Baranchikov represented Component 2 in a meeting of the Working Group on pest protection of the Forest Management Agency in Moscow. The Vice-leader of the Agency Mr. M. Girayev led the meeting. During the meeting information on the mutual activity of the Russian Center of Forest Protection and the FOREST Project was presented to the audience. Baranchikov stressed that modern methods of pest monitoring developed by the project were successfully implemented by local branches of the Center in Siberia and the Far East. Baranchikov also pointed out that a reorganization of the Centers could ruin the existing system and could make questionable the process of institutionalizing project results. After lengthy discussion, the working group recommended that the Agency should preserve the existing structure of forest protection in the country.
- **Pest Monitoring Component Results delivered to Siberian Zoological Forum.** Once every 4-5 years zoologists, ornithologists and entomologists of Siberia and the Far East meet together at the Siberian Forum on Zoology. The 250 participants at the plenary session of the Zoological Forum in Novosibirsk heard about FOREST Project results on new methods of insect pest monitoring. Forest entomologists from Novosibirsk, Sverdlovsk, Chelyabinsk and Kurgan Oblasts received the presentation well. The organizing committee of the Forum invited the project representative Dr. Yu. Baranchikov to submit a paper to the “Euroasiatic Entomological Journal” on the role of forest protection zoning in monitoring Siberian moth populations.

- **Work with FOREST Project Promotes Academic Growth of Young Scientist in Forest Protection.** Vladimir Petko, a young scientist with the Sukachev Institute of Forest received his Ph.D. diploma in Ecology. He based his dissertation, “Pheromone Monitoring of Siberian Moth” on field application of his research findings. His work was partially supported by the FOREST Project. Dr. Petko’s attainment of his degree while working with the Project is yet another major legacy of the Project.

3. Success Story

FOREST Project facilitates forest protection activity at Sakhalin. In spite of its fast recent development, Sakhalin Oblast’ has never had any specialized forest protection unit. In 2002, a team of FOREST project volunteers and consultants visited several forests on the island and prepared a report on the need for an investigation of forest health problems in Sakhalin. In response to this request, in 2003, the Ministry of Natural Resources organized a special forest pathology expedition to Sakhalin. The expedition sampled 1 million hectares of Sakhalin taiga and provided recommendations on how to deal with insect pests and diseases in that area.

To facilitate the process, the Sakhalin Agency of Forest Management shared costs with the FOREST Project to develop a map of forest pathology problems on the Island. The forest protection maps, developed by the FOREST Project, delineate the taiga regions that are highly susceptible to defoliation by forest insect pests and are the primary tool that will be used for planning pest monitoring activities in the future. Now, Sakhalin has developed a forest protection map. The local Agency of Forest Management has assisted in its preparation by providing, without charge, critical information about forest types of the island. The map insures placement of an optimal network of insect pest monitoring stations to protect forests in the most economically important areas. Areas with oil and gas production industries, primary forest resources, and recreation areas are all receiving special attention. Using GIS technology project staff integrated all data provided to construct a map that graphically illustrates a reduction of the total forested area needing to be monitored to only 20 percent. This represents an 80% reduction in potential costs since this area does not require monitoring. For the first time, Sakhalin foresters received a clear picture of forest insect pest and disease problems on the Island.

Now, the Agency and the Project combined efforts and trained 25 foresters, again on a cost-share basis. The USAID-funded FOREST Project brought a team of highly experienced Russian experts on forest protection to Yuzhno-Sakhalinsk. They presented lectures and practical classes on current pest monitoring methods. The Agency provided funds for transportation and per diem costs for local participants attending the workshop. These attendees represented all 17 leskhoses on the Island and assisted in further training of their colleagues. Sergey Kotelnikov, Acting Director of Sakhalin Oblast’ Department of the Natural Resources Management said: “It was a real mutual effort to protect the health of our forests. We are looking for future close collaboration with the FOREST project”.

Federal Agency for Geodesy and Cartography Approve Publication of Project Maps:

Forest protection maps for Primorskiy Krai and Sakhalin Island successfully passed a technical review by experts at the Federal Agency for Geodesy and Cartography (“Gosgeonadzor”) in Khabarovsk. The governmental experts approved the high professional quality of both maps. A team of forest entomologists and GIS specialists from the Far Eastern Forest Management

Institute of the Ministry of Natural Resources, Sukachev Institute of Forest and the Pacific Institute of Geography, both from the Russian Academy of Science created the maps. They worked on a cost share basis with local administrations and institutes of Primorskiy Krai and Sakhalin Oblast'. As with other similar maps developed by the Project, these maps will allow an 80% reduction of the 140 thousand square kilometers of total forested area needing to be monitored to prevent forest pest outbreaks. Local forest administrators have already requested 1000 copies of each map for distribution in each region.

Federal Forest Management Agency will Institutionalize FOREST Project Results: The Department of Forest Protection, Forest Management Agency, Ministry of Natural Resources expressed high interest in the achievements of the FOREST Project in forest protection both from fire and insect pests. Mr. Albert Kasparov, the new Department Head proposed to include the main activities from the Pest Monitoring Component's Plan of Work and add them to the 2004-2005 working plan of the Agency for mutual implementation on a cost-share basis. This includes development of a set of recommendations for Siberian moth monitoring. This will reflect the FOREST Project approach which is based on GIS-technology and pheromone monitoring. It will also include a jointly sponsored workshop on modern methods of monitoring. This meeting will be held in Khabarovsk in October. Also included will be a Russian forest protection experts' tour to the United States to learn more about the institutionalization process of pheromone usage in forest management. In addition, FOREST Project representatives were included as independent experts in the Working Group on Russian Forest Protection Renovation. Mrs. Irina Makarenkova – the new Russian forest protection official approved publication by the Ministry of two volumes of the forest protection field guide created for the Agency by the FOREST Project.

First Volume of FOREST Project Field Guides on Forest Protection Submitted for Printing: The book "Diseases of Forest Trees", prepared by the leading Russian forest pathologists from Moscow Forest University who worked on the manuscript as consultants, has been submitted for printing by the Ministry of Natural Resources. It is the first book of a set of three volumes on "Diseases and Pests of Russian Forests". The series was planned to provide an overview of the primary biological organisms involved in forest degradation and the modern methods that have been developed to monitor their activity. The goal for this major legacy of the Project was, from the beginning, planned as a mutual effort of the FOREST Project and the Ministry of Natural Resources. FOREST supported preparation of the manuscript and color illustrations. The Ministry promised to publish and distribute the three volumes. Reorganization of the Ministry this past year delayed printing for a year. Now, two volumes of the field guide are in the Ministry's publication plan and 2000 copies of the first one will be printed in November 2004.

4. Project Focus Areas – Activity Information

Work on Pest Monitoring System Completed in Siberia and the Far East. The final season of Siberian moth monitoring throughout Siberia and the Far East with Project support was completed in August. Centers of Forest Protection in Tomsk, Irkutsk, and Sakhalin Oblasts, Krasnoyarsk, Khabarovsk, and Primorskiy Krai collected pheromone traps, previously placed in

7 subjects of the Russian federation. With the help of these traps, employees of the Centers monitored Siberian moth in 120 leskhoses covering an area of six hundred and seventy thousand square kilometers this summer. All work was done on a share cost basis. The Centers covered 30% of the total effort (i.e. sampling for larvae).

Refinement of Siberian Moth Pheromone Monitoring at Sakhalin. FOREST Project partners from the Institute of Chemical Means of Plant Protection in Moscow have completed field work to develop a pheromone specific for local populations of Siberian moth on Sakhalin Island. The local subspecies responded poorly to the pheromone developed for populations on the mainland. Partners from the Institute of Chemical Means of Plant Protection in Moscow have developed a new version of the pheromone for the Sakhalin subspecies. They tested it in Sakhalin forests and will analyze trap capture data in the laboratory.

Refinement of Siberian Moth and Pine Moth Pheromone Monitoring in Siberia Successfully Completed. The Sukachev Institute of Forest has successfully completed tests to determine the most promising pheromone concentration in dispensers for more accurate pheromone sampling of two related pest species, the Siberian Moth and Pine Moth. The Sukachev Institute will use this information to monitor populations both species. The Institute estimated the approximate radius of a trap's ability to attract populations, information that is vitally needed for planning monitoring operations.

Work on Field Guide "Insect Pests of Russian Forests" is continuing, third and final volume of the field guide series should be completed next spring. A team of 10 authors held a meeting. They are the leading forest entomologists from Moscow, St. Petersburg, Novosibirsk, Krasnoyarsk, Irkutsk, Khabarovsk and Vladivostok. Leadership is provided by the Sukachev Institute of Forest, Siberian Branch, Russian Academy of Science. The FOREST Project is supporting this work under a special Agreement with the Institute.

Forest Protection Methods Workshop on Sakhalin – Shared Costs for Mutual Benefit: The FOREST project and Sakhalin Department of the Ministry of Natural Resources organized a technology transfer seminar on a cost sharing basis. Experts trained twenty-five participants, representing all 17 leskhoses on Sakhalin Island, in modern methods of forest protection during this one day seminar in Yuzhno-Sakhalinsk. All participants learned about sampling techniques for Siberian moth adults and larvae. Participants also had an opportunity to learn how to use hand-held Geographic Positioning System (GPS) units.

Sample Copies of Field Guide "Methods of Forest Pest and Disease Monitoring" Printed for Ministry Experts. Twenty-five sample copies of the much needed field guide, entitled "Methods of Forest Pest and Disease Monitoring" are available. Experts of the Ministry of Natural Resources produced them under the FOREST Project. Once approved, the field guide can be published and will play a valuable role in improving forest protection in Russia. This is the second volume of the planned 3-volume set of forest protection field guides being developed by the FOREST project.

Siberian Moth Pheromone Now Produced by Private Company. A private company "Parnassius" located in Moscow has produced pheromone lures with Siberian moth pheromone

preparation called “Denalol”. The lures will be used for monitoring Siberian moth populations throughout Siberia and the Far East. The FOREST Project purchased the lures for Centers of Forest Protection in 6 regions. The company also has received a request from other centers and private companies to sell lures for monitoring the Siberian moth in other regions of Siberia. This is the second time that a private company has been able to capitalize on FOREST results in Component 2. The first occurred in the first year of the Project when a woman-owned firm in Krasnoyarsk started making the traps used to capture male moths.

Sakhalin Forest Management Agency Assists FOREST Project in Forest Protection. Mr. Sergei I. Kotelnikov—Chief of the Agency of Forest Management and Head of the Sakhalin Department of the Ministry of Natural Resources—recently sent a letter of appreciation to the FOREST Project Director. Mr. Kotelnikov expressed satisfaction with the results of forest pest protection activity on the Island and agreed to cover costs in organizing a forest pest monitoring tech transfer seminar in Yuzhno-Sakhalinsk on June 2nd. The Agency also provided, without charge, information about forest types on the island. This information is greatly facilitating the creation of a forest protection map of Sakhalin. Like other such maps developed by the FOREST Project, this one will insure optimal placement of a network of insect pest monitoring stations to protect forests in the most economically important areas on the island.

FOREST Project Results Presented at Siberian Forestry Forum. Professionals presented three plenary session presentations at the All-Russia Conference on “Structure, Function and Organization of Forest Ecosystems” (Krasnoyarsk). The presentations focused on the results of the FOREST Project, with two of them specific to the Pest monitoring component. Three papers were published in the conference Proceedings.

Plan for Joint Work Delivered to Forest Management Agency. Mr. A. Kasparov, head of the Agency’s Forest Protection Department (Moscow) received a plan for joint work between FOREST and the Ministry. The Work Plan includes the main activities of the Pest Monitoring Component.

Preparation for Inter-Regional Forest Protection Seminar under way. The last training seminar for the forest protection staff of the Russian Far East will take place in Khabarovsk in late October. Twenty-five representatives from Khabarovsk and Primorskiy krais are planning to attend and be trained in modern pest monitoring techniques. As usual, this seminar will be organized on a cost share basis by the FOREST project and local Agencies of forest management.

Recommendations for Institutionalization of FOREST Results in Preparation. Five short-term consultants started preparation of a set of recommendations on the Siberian moth monitoring system for Siberia and the Far East. The request originated from the Department of Forest Protection of the Forest Management Agency, Ministry of Natural Resources to prepare these recommendations to insure institutionalization of Project results.

5. Results by Objective (Indicators)

Pest Monitoring Results as per USAID/Russia's Strategic Objectives

SO 1.6 Environmental Resources

Managed More Efficiently to
Support Economic Growth

IR 1	Previous Total	This Quarter Total	LOP total	Comments
(1) Number of improved environmental practices adopted in targeting regions.	7	7	7	Siberian moth monitoring methodology improving forest protection practices in 7 regions.
	6	6	6	Forest Protection Maps for the region, adopted by the Region Forestry Agency
(2) Number of NGOs adopting citizen advocacy program	NA			
(3) Businesses showing improved performance	2	9	9	Local Forest protection Centers in 7 regions; 1 pheromone trap producer and 1 pheromone dispenser producer
IR 4				
(2) Hectares monitored	200,000			
(3) Regions adopting NRM practices	5	8	8	
Number of people trained in quarter in Component 2 – 139				
Number of women working in Component 2 – 24				

6. Key Deliverables Accomplished Per Approved Workplan

Summary of Component 2 Tasks

Task	Location	Persons Involved	Status/Results
<u>Task 1.1:</u> Training of technical staff to use Outbreak Prediction Model	U.S. and Centers of Forest Protection	McFadden, Miller, Parker, C2 Coordinator, Kobel'kov, Centers staff	Siberian Moth Outbreak Prediction Model is being evaluated in 4 Centers of Forest Protection.
<u>Task 1.2:</u> Official Acceptance of Siberian moth pheromone monitoring recommendations on the governmental	Krasnoyarsk, Khabarovsk and Moscow	C2 Coordinator, Consultants, Ministry of Natural Resources	Activity was included in the Ministry work plan. Consultants started work in September.

level.			
<u>Task 1.3:</u> Study tour of key specialists of Ministry of Natural Resources to the United States.	Krasnoyarsk	Krasnoyarsk office, C2 Coordinator, McFadden	List of participants approved, budget renovated. Consultant for preparation of documentation was hired.
<u>Task 2.1:</u> Complete delineation of Regions of Siberia and Russian Far East Forests.	Sakhalin and Tomskaya Oblasts, Primorskiy and Khabarovsk Krai	Institute of Forest, Dal'KNILKh, C2 Coordinator	Sakhalin and Primoriye maps went through the Gosgeonadzor expertise for review and were sent to the publisher
<u>Task 2.2:</u> Complete Refinement of Tools for Pheromone Monitoring.	Sakhalin, Krasnoyarski Krai	Institute of Forest, Dal'KNILKh, C2 Coordinator	Field work completed. Data are ready for analysis.
<u>Task 2.3:</u> Continue Siberian Moth Population Monitoring in Different Regions of Siberia.	Krasnoyarskiy Krai, Republic of Khakassiya, Tomsk and Irkutskaya Oblast'	Centers of Forest Protection, Institute of Forest, Leskhoses of Khakassiya	Field work completed. Data are ready for analysis.
<u>Task 2.4:</u> Continue Siberian Moth Population Monitoring in Different Regions of the Russian Far East.	Khabarovsk, Primorskiy Krai and Sakhalin Oblast'	Centers of Forest Protection, Dal'KNILKh	Field work completed. Data are ready for analysis.
<u>Task 2.5:</u> Continue Pheromone Monitoring of Siberian Moth and Gypsy Moth in Areas with Continuous Trap Distribution.	Krasnoyarsk	Institute of Forest, Consultants	Field work completed. Data are ready for analysis.

Task 2.6: Final Inter-Regional Seminars on Monitoring of Forest Pests	Moscow, Krasnoyarsk, Khabarovsk	Institute of Forest, Partner organizations, Khabarovsk office, Consultants	Inter-regional seminar is being organized and will take place on the 27 th of October in Khabarovsk
Task 2.7: Complete Field Guide Preparation	Krasnoyarsk	Sukachev Institute of Forest	Preparation of the "Forest Pest" Field Guide was launched.
3.1. Technical Coordination	U.S., Krasnoyarsk, Khabarovsk, Moscow	McFadden, Parker, C2 Coordinator, Tsykalov, Kuzmichev	<p>The Working Group meeting scheduled for October 26th is being organized.</p> <p>C2 Coordinators' meeting with Russian Forest Protection Department Chief Mrs. Irina Makarenkova took place in August.</p> <p>C2 Coordinator took part in Agency WG on Ministry forest protection meeting in Moscow in September.</p> <p>Results of Pest monitoring Component were presented at the Siberian Forest Forum in Krasnoyarsk and at the Siberian Zoological Forum in Novosibirsk.</p> <p>Revision of Year 4 final report was submitted and approved.</p> <p>3 monthly reports and 1 quarterly report were prepared and submitted.</p> <p>5 agreements for short-term consultants were drafted, signed and monitored.</p> <p>The Russian Coordinator met with the main partners, reviewed and accepted their work during July-September (Russian Center of Forest Protection, Institute of Chemical Means of Plant Protection, Far Eastern Institute of Forest Management, Sukachev Institute of Forest, Siberian Centre of Forest Certification; Tomsk, Irkutsk, Vladivostok, Khabarovsk and Krasnoyarsk Centers).</p>

			Two consultative meetings with Project Vice-Director occurred in Moscow in August-September. Russian Coordinator had phone and e-mail consultations with Project Director P. Perner (on daily basis), Vice Director E. Kuzmichev (2-4 times per month) and with Krasnoyarsk Office (2-3 times per week). Limited numbers of conference calls with The Heron Group were useful additions to daily e-mail communication.
--	--	--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

7. Notifications – Issues, Problems, Findings on Work to Date

Publications

Farber S.K., Sokolov V.A., Baranchikov Yu.N., Kondakov Yu.P., Romanov A.A. Evaluation of Timber losses after Siberian moth outbreak in the 90-s of XX century. “Lesnaya taksatciya I lesoustroystvo”, 2003, N 1, p. 138-142 (in Russian).

Baranchikov Yu.N., Pet’ko V.M. Pheromone trap construction for Siberian moth monitoring. “Lesnoye Khozyaistvo”, 2004, N 3: 54-56 (in Russian).

Baranchikov Yu.N., Kondakov Yu.P. Outbreaks of Siberian Moth: Organization of Monitoring and Evaluation of Results. “Structure, function and organization of forest ecosystems”, Krasnoyarsk: Institute of Forest SB RASc, 2004. P. 257-259 (in Russian).

Farber S.K., Sokolov V.A., Baranchikov Yu.N., Kondakov Yu.P. Evaluation of Losses after Siberian Moth outbreak in Krasnoyarski Krai. “Structure, function and organization of forest ecosystems”, Krasnoyarsk: Institute of Forest SB RASc, 2004. P. 473-475 (in Russian).

Tsykalov A.G. The FOREST Project’s Impact on Forestry in Asian Russia. “Structure, function and organization of forest ecosystems”, Krasnoyarsk: Institute of Forest SB RASc, 2004. P. 145-147 (in Russian).

C. Component 3 - Non Timber Forest Products and Secondary Wood Processing

1. Overview

FOREST Project market studies and mill assessments have identified the opportunity to build trade and investment linkages between U.S. molding & millwork companies and Russian appearance-grade lumber producers. Assisting Russian suppliers of kiln-dried, appearance-

grade lumber to understand the U.S. market, FOREST, in cooperation with R.E. Taylor and Associates, arranged a Study/Trade tour of Russian wood processing companies to the US which was followed by a Reverse trade tour of foreign and American businesses to Siberia. The successes of both tours indicate that there are opportunities leading to new partnership for both Russians and Americans companies.

2. Highlights

- The Second International Conference On Forest Biological Active Resources was held in Khabarovsk in September with FOREST Project support. The Conference organizers were the Far Eastern Forestry Research Institute, and the Ministry of Natural Resources of Khabarovsk Krai. This conference would support further NTFP sector development through summarizing and distributing accumulated experience in the NTFP processing sphere. The representatives of FOREST Project's Partner Associations (Region 7, Far Eastern Association of NTFP Processors, Siberian Interregional Association of Natural Products' Producers) took an active part in this conference. They will distribute the materials of the conference and information amongst members of their associations, so the NTFP companies could implement this experience and knowledge in the NTFP sector development.
- FOREST has provided significant assistance in the establishment of the Indigenous Peoples NTFP Harvesting Center in Khabarovsk Krai. Project funding has assisted the Center to develop its own web site and an instructional video. This will further assist the center to advertise its activity and increase sales. As a result more indigenous communities will now be involved in NTFP harvesting. FOREST support is in cooperation with the Federal Indigenous Peoples Support Program.
- Siberian Association of Natural Products Producers is expanding its membership. NTFP processing company Flora Anix from the region of Altai, has applied for membership and was granted membership in July. This expands regional borders of the association and strengthens its status. In September the East Siberian Rehabilitation Medicine Association has also become a new member. The Center provides medical and rehabilitation services with extensive use of NTFPs to Krasnoyarsk Krai.
- The Siberian NTFP Association and the Association of Rehabilitation Medicine were assisted by volunteer B. Dodson in developing a collaboration strategy. The two associations have found areas for active collaboration including herbal teas, herb extracts and fir essential oils.
- New association member Flora Anix has signed an agreement with Manskaya Dacha company to supply NTFPs during the harvesting season of 2004.
- Individual Entrepreneur Yalov has extended its contract with LLC Manskaya Dacha for the shipment of 10 tons of blanched frozen chanterelles worth \$25,500. This contract will allow the company to expand its production volumes.
- FOREST partners SWP company Seal Plus and NTFP processing company Manskaya Dacha have signed a contract to produce 5000 wooden packages for Manskaya Dacha for sale to Flora Anix Company. This cooperation has resulted in creating two jobs at Seal Plus during the period of mushroom harvesting and allowed Manskaya Dacha to reduce its expenses for packaging.

- This year members of the Siberian Association of Natural Products Producers plan to increase their export sales to 3 million Euros. Current contracts are for the shipment of dried, frozen and brined mushrooms to Germany and Finland.
- Chekhov Food Complex, natural wild berry soft drinks producer was assisted on the technology in processing berry pomace. Two new products – sauce and jam were offered for production to utilize the berry after-processing remains. The production will help revitalize the line that manufactured sauces and mayonnaise in the past. Sakhalin Oblast administration has 51% of the enterprise shares and promised support in developing new products. The company is now searching for the way to secure financing (\$30,000 - \$40,000) to modernize and acquire the equipment to launch up the production. We are referring this opportunity the ACDI VOCA fund on Sakhalin for potential followup.
- Recommendations on improving the quality of wild berry soft drinks were provided by a national volunteer to Aqua Spring, Sakhalin natural soft drink manufacturer. The recommendations will help the company to improve the quality and the product's shelf life.
- A FOREST National volunteer assisted LLC Technologia Next, a bakery goods producer in assessing the launching of a production line of traditional Russian bakery products with all natural jams and marmalades. The company plans to start the new production in December and January.
- WI Krasnoyarsk branch office has been awarded a medal for implementation of the FOREST project in Krasnoyarski Krai at the international trade fair entitled Forest Wood Processing: Equipment and Products, held in Krasnoyarsk during September. The FOREST booth was visited by more than 500 visitors among which were Krasnoyarski Krai Vice Governor Mr. Gnezdilov, and Chief of the Forest Service Mr. Vekshin. Special interest was shown for Biomass energy technologies and NTFP products.
- In September Malakhit General Director Mr. Kartin visited the largest national trade show Lesdervmash which took place in Moscow. As a result of participation he was able to sign a contract with a company from Saint Petersburg to supply his products – and also recently signed a contract to purchase new equipment worth \$ 40,000.
- Krasnoyarsk Regional Director Mr. Tsykalov had a meeting with Krasnoyarsk branch Vneshtorgbank manager. The major issue discussed at the meeting was obtaining loans from the bank by member companies of the Siberian Wood Processors Association on a preferential basis. In particular it was discussed on the possibility of obtaining a \$ 2.2 million loan to purchase equipment and build a plant to produce larch lamella by Vozrozhdeniye company. The business plan for the company was developed by FOREST volunteers Mr. Bratsuk and Miss Nagayeva. As well KODOK Company needs a \$3 million bank loan to fulfill a contract signed with Woodgrain Millwork

3. Success Story

Reverse Tour to Siberia

Winrock International together with R E Taylor and Associates organized and conducted a Reverse Tour for forest industry sector foreign companies to Krasnoyarsky Krai and Irkutskaya Oblast. The idea to organize this Reverse Tour appeared as the result of the Study/ Trade Tour of Russian Wood Processors to the United States which FOREST Project also organized. Due to the great interest of American and foreign companies in cooperating with Russia in the forest industry, there were 17 representatives from the largest forest industry companies from the US,

Canada, Australia, Germany, Chili, and New Zealand who took part in the Reverse Tour to Siberia.

During two weeks tour participants visited 21 forest industry enterprises in Krasnoyarski Krai and Irkutskaya Oblast and had a chance to meet with top managers of those companies, evaluate the technology, product quality as well as to ask hundreds of questions on resources available, licensing procedures, production and transportation costs, etc.

Foreign businessmen greatly appreciated an opportunity to participate in round table discussions organized by territorial, municipal and district administrations. Altogether the delegation had a chance to meet with 2 vice governors, 4 mayors and 4 heads of district administrations. Government officials -- together with the representatives from banks, transportation, tax and customs authorities, as well as businesses -- presented a wide spectrum of opportunities for foreign investors and provided comprehensive answers that helped to break down misperceptions and provide understanding about the possible risks.

Meetings were usually followed by lively discussions with businesses and the establishing of direct business contacts. Russian managers invited their foreign counterparts to visit their production facilities and discuss future collaboration. Woodgrain Millwork, the largest windows molding and doors producer in the US proved to be one of the most aggressive participants. The company had placed an immediate order for a trial shipment of red pine lumber and during the visit had a chance to inspect the quality and actually helped to grade and sort the lumber since Russian manufactures are not quite familiar with US standards. Woodgrain Millwork has proved their intentions of doing business in Siberia are quite serious by hiring two employees in the Krasnoyarsk and Irkutsk territories. One of them was included in the delegation for training purposes and both of them will undergo further training in the US. All foreign participants have noted that such a tour was extremely important for them since among other things it provided a great opportunity to come to know each other and develop mutual strategies for working in Russia.

Trade fairs bring partner companies closer together

In July FOREST sponsored participation of 7 companies representing two associations at the Vladexpo International Trade fair held in Vladivostok. Siberian companies were represented by Siberian Interregional Association. As a result each participant was awarded a diploma. Business relations between the participants and associations became stronger and embarked on a new stage in their development. Thus LLC Titan applied for a membership at Region 7 Association. The same company showed interest in buying wild berries both from Siberian and Sakhalin companies. Forest Products reached an agreement to purchase berries from Sakhalin. Vostokbioproduct was successful in signing 3 agreements with Vladivostok pharmaceutical companies to supply herbal mixes for medicinal purposes. The first trial shipments are worth \$2000. A Vladivostok sports organization showed interest for health drink "Mountain Air" which is produced in Sakhalin. The drink is manufactured from wild berries concentrate; currently negotiations are under way for trial shipments of the product.

Bringing health products to Sakhalin Island

The SI GOLD Sakhalin Exhibition -- one of primary trade fairs of Sakhalin Island -- took place on August 23-27. The FOREST Project sponsored participation for 5 NTFP processing companies from Siberia and the Russian Far East. The companies were able to promote their products for potential consumers on Sakhalin Island, which are the largest international oil and gas companies. FOREST booth was definitely a show stopper and evoked huge interest from large oil and gas companies such as EXXON, BP and Shell. The success at the show can be attributed by the preparation work performed by FOREST volunteer Thomas Wilbur, as well as mass media coverage. Currently contracts are being negotiated by Dincoma with Petrosakh and Ecoshelf for the shipment of health drinks worth \$34,000 and Forest products with LLC Tsvet for honey shipment worth \$20,000. Estimated Dincoma's contracts for the years of 2004-2006 could reach as much as \$730,000.

4. Project Focus Areas – Activity Information

Ongoing Activities:

Preparation for participation at Expo East trade fair, Washington D.C.

Upcoming Activities:

Expo East trade show in Washington, D.C.

MedInfo trade show in Yuzhno Sakhalinsk

Non Timber Forest Products. Culture of Use. International Fair and Forum in Moscow organized by IUCN

5. Results by Objective (Indicators)

SO 1.6 Environmental Resources Managed More Efficiently to Support Economic Growth				
	<i>Year Five</i>	<i>This quarter</i>	<i>Life of Project</i>	<i>tails</i>
IR 1.6.1.1 - Business associations strengthened			7	This indicator counts only new partner associations, not continued activity of existing partners, which is reflected in sub-indicators. Six of seven NGO partners recorded results on the sub-indicator for development of new services in Year Five.
IR 1.6.1.2 - Businesses participating in associations	3	3	208	Flora Anix- SIANPP East Siberian rehab medicine Association – SIANPP Titan – Region -7
IR 1.6.1.3 - Businesses showing improved performance	5	5	61	Flora Anix Chekhov food complex Aqua Spring Trade Invest Mag Technologia next
SO 2.1 More Open, Participatory Society				
	<i>Year Five</i>	<i>First quarter</i>	<i>Life of Project</i>	<i>Details</i>
IR 2.1.2.2 - Advocacy campaign conducted	0	0	1	

Other Relevant Indicators				
Training participants (female) Female number represents a minimum; more women may have participated but numbers not available.	44(6)	44(2)	717(111)	Trainings in 1st quarter: NTFP harvesters – 41(4) 3 (2) trainers trained for the associations (Terentyev, Siforkina, Polyakova)
	<i>Year Five</i>	<i>Details</i>		
New employment	62	60 -Dynasty 2 -Seal Plus		
New enterprises				
New production lines, products, or technologies at existing enterprises	4	Malakhit Chekhov Food Complex Trade invest Mag Aqua Spring		
Overall increase in association membership	3	Flora Anix- SIANPP East Siberian rehab medicine Association – SIANPP Titan – Region -7		
Export contracts through trade shows and e-commerce (number and value)	\$56,000	Forest Products – 20,000 Dincoma – 34,000 Vostokbioproduct – 2,000		

6. Key Deliverables Accomplished Per Approved Workplan

Year Four Task per Workplan	Deliverables per Workplan	When and How Accomplished	Comments
i. Continue to build capacity of associations and resource information centers to provide capacity to individuals, enterprises and companies. Continue training of their leaders in fundraising, advocacy, the range of services expansion, data collection and analysis, Internet information resources, and periodic newsletters for the associations and website management.	5 newsletters on organic certification prepared and distributed, 3 trainers for the associations trained		
ii. Summarize FOREST findings for Associations and Resource Centers to Use			
iii. Support the Sakhalin NTFP processing companies, identify their common problems and solutions, identify the most promising companies, if deemed an area of	Companies identified, assessment made, 3 companies assisted, 3		1-Chekhov Food Complex 2-Trade invest Mag 3-Aqua Spring

need, then provide assistance to them in uniting into a stand alone association or in joining one of the existing associations.	participants included into Expo East trip		(2 reps from the Administration 1- company rep 1-Chairman of the Indigenous people association participate I the US study tour)
iv. Help associations and companies prepare for and participate in regional, interregional, federal and international trade shows. On a case by case – trade show - ‘determined basis,’ companies’ contribution to cost-sharing for trade show participation may be 25% - 100%. In some rare case(s), it may be discussed with USAID that no cost-sharing should be the tact taken, however as we try to be regionally and market-driven.	1. VladExpo , Vladivostok 2. SIGold, Yuzhno-Sakhalinsk 3. esdrevmash, Moscow 4. Forest, Krasnoyarsk	7 companies, Siberian association 4 companies, Siberian Association 12 participants Siberian association	July August September September
v. Assist companies in the search for organically certified NTFP markets, identify the most appropriate organic certification standards, and provide assistance to interested companies in getting their products certified to extent possible as we enter close-out period.	5 newsletters prepared and sent to the associations	August - September	
vi. Assist Krasnoyarski and Khabarovski Krai governments in training the local NTFP harvesters in the study and practical application of the newly adopted krai-level NTFP Harvesting Rules developed on the basis of sustainable forest management principles.	Seminar for NTFP harvesters took place in Khabarovsk 500 copies of new harvesting rules for Khabarovski Krai have been published	Seminar took place on the 10th of August in Khabarovsk	41 seminar participants trained
vii. Participate in the ‘SIGOLD’ International Trade Show in Sakhalin.	4 companies and the Siberian association took part	The trade show took place on the 24-26 of August in Yuzhno Sakhalinsk	Forest Products – \$20,000 contract Projected Dincoma’s contracts \$730,000
viii. Increase awareness of Russia’s unique NTFPs and their properties through publications in the overseas periodicals. In collaboration with the WWF develop and publish a three			

language directory of RFE herbs intended for international and Russian stakeholders.			
ix. Facilitate reverse tour(s) by teams of the U.S. woodworkers to Siberia and/or the Russian Far East. To every extent possible during this close-out period, help companies start and develop mutually beneficial partnerships.	1 reverse tour accomplished. Another one is planned for April. The participants will visit Khabarovsk and Primorsky krai	In June –July reps of 17 foreign companies visited Krasnoyarsk and Irkutskaya Oblast	
x. Contribute to the development of a concept and a business plan on the establishment of a wholesale facility (market) for the Sakhalin woodworking companies.			
xi. Conduct sector-based workshops, as well as business management seminars for forestry SME.	Seminar for NTFP harvesters		41 participant

D. Component 4 - Renewable Energy Alternatives/Biomass

1. Economic Overview

FOREST's biomass energy activities support national objectives to strengthen the forest products industry and the economy of Russia. FOREST continues to receive numerous requests from companies in search of assistance to develop biomass energy systems capable of burning wood wastes. As the private sector continues to grow, an increasing number of Russian companies are seeking ways to cut costs and add value to raw logs. The restructuring of the United Energy Systems of Russia and the difficulty in forecasting energy tariffs has also created an unstable energy environment. Thus, for many companies, investing in biomass energy systems fueled with wood wastes makes compelling economic sense. Companies save by utilizing biomass wastes for which they currently pay a disposal cost, and by replacing purchased fuel and electricity with self-generation. Companies also earn profits by utilizing biomass systems to produce wood products with greater value for local and international markets. FOREST is continuing to work closely with its partner companies in the design, start-up, commissioning, and operation of facilities. Component 4 will organize a Fall 2004 workshop in partnership with regional governments to examine the potential for providing heat and power to remote settlements with biomass energy systems. Confidence in local government and the strength of civil society in remote communities depend on the provision of heat and power during the long winters. Biomass energy systems can provide local economic benefits while reducing overall costs and improving environmental performance.

2. Highlights

- Partner company Ros-DV (Khabarovsk Krai) purchased and installed three Koetter dry kilns (100 m³ capacity each) and a 1.2 MW Taylor biomass boiler. The facility will enable the company to produce 12,000 m³ dry lumber per year with an estimated profit of over 350,000 USD/year. The company plans to install six additional dry kilns (160 m³ each) in the remote settlement of Sukpai to produce 24,000 m³ dry lumber per year with about 700,000 USD/year added value.
- With FOREST financial assistance, partner company Parusnovskiy DOK (Sakhalin) developed a construction plan for a dry kiln-biomass boiler system (0.32 MW thermal capacity), which was then used to secure a ROLL grant. The company has begun constructing the dry kiln-biomass boiler system. When complete, the company expects to earn an additional 15 USD per cubic meter from the production of high quality lumber.
- FOREST partner company New-Len-Oil (Irkutsk) began assembling three Comkond biomass boilers (5 MW each). The boilers will heat ten Melbuck-Vanicek dry kilns. This boiler-dry kiln facility will enable the company to produce 48,000 m³ dry lumber per year with an estimated profit of over 1.5 million USD/year.
- FOREST assisted partner company Nord Union develop a proposal to support the construction of a 2 MW biomass heat system for the company and the remote settlement of Buyhukly. The natural gas company, Sakhalin Energy International will provide financial support if the proposal is approved.
- Component leader Tatyana Khodos took part in two international forums –the Baikal Economic Forum in Irkutsk and the EurAsEC – Business World in Moscow - and arranged a seminar for woodworking companies in Ust-Kut, Irkutskaya Oblast. Ms. Khodos' presentation at EurAsEC will be published in the forum proceedings and contribute efforts to disseminate information on FOREST Project biomass energy activities in Siberia and the Russian Far East.

3. Success Story

Success Story # 1

Igirma-Tairiku – A Model for the Region

Igirma-Tairiku, a long-standing FOREST partner, has two new Biysk boilers (13 MW thermal energy) in full operation. FOREST biomass energy experts worked alongside Igirma-Tairiku to perform acceptance tests and demonstrate procedures for effectively operating and maintaining the company's two installed boilers. Igirma-Tairiku is now beginning to assemble a third (of four) modified boiler(s). The facility will enable the company to put into operation 16 - four Muhluck Vanicek and 12 Tekmawood – dry kilns and increase dry lumber production by over 150,000 m³ per year, with an estimated profit of over three million USD per year. These modified boilers serve as models for other companies in the region interested in installing similar biomass energy facilities. For instance, another FOREST partner company, TM-Baikal, is modifying two Biysk boilers (6.5 MW each) based on Igirma-Tairiku's experience. This boiler-dry kiln biomass facility will enable TM Baikal to increase its dry lumber production from 7% to 80%, producing 115,000 m³ of dry lumber per year. The company is expected to earn \$2.9 million USD per year from added value dry lumber.

Success Story # 2

Boiler-Dry Kiln System Installed at Shelekhovskiy Zavod ZBI (Irkutsk)

FOREST design partner company, IrkutskNIILP (Irkutsk), designed a biomass boiler-dry kiln system and sawmilling facility for Shelekhovskiy Zavod ZBI company. The company has put into operation two NUOVA VALMAGGI biomass boilers (1.8 MW each), four Incomac dry kilns (120 m³ each), and a Global Edge glu beam facility. The company is processing 20,000 m³ round wood and producing 10,000 m³ of glu beams per year. The system operates automatically, with an estimated profit of over 300,000 USD per year. The company plans to produce different moldings from dried Siberian pine. The company already produces high quality dry lumber to 8% moisture content, comparable to international export standards.

4. Project Focus Area – Activity Information

Ongoing Activities

The biomass energy component is making preparations for a civil society workshop from November 18-19, 2004 in Khabarovsk to address community heat and power needs of remote settlements in the Russian Far East and Siberia. In addition to the U.S. experience with biomass energy systems of all sizes, the Austrian government has extensive experience with the use of biomass energy in community heat and power plants. FOREST staff will identify and transfer the most relevant parts of the U.S. and Austrian experience with biomass energy to the Russian Far East and Siberia, and help local and regional governments identify and develop plans for pilot projects.

Upcoming Activities

In Year 5, FOREST will conduct a study tour to increase technical expertise and knowledge of Russian specialists on how off-grid remote settlements operate biomass energy facilities. Either Alaska or Austria will be selected as a potential site to host the study tour given their rich experience with the development and use of biomass energy systems to produce heat and power for remote communities.

Given different technical expertise, both international and Russian consultants are assisting Russian FOREST partner companies. Mike Milota, an international expert in kiln drying, will train technical experts at Gorinskiy KLPK (Khabarovskiy krai), as well as Russian FOREST consultants, in kiln drying larch. Sergey Mansurov, an expert in kiln drying from Siberian Technological University (Krasnoyarsk) will assist Les Export company (Primorye) in kiln drying Siberian pine.

5. Results by Objective (Indicators)

SO 1.6 Environmental Resources Managed More Efficiently to Support Economic Growth				
IR 1.6.2 Operating efficiency of businesses adopting environmentally -friendly practices improved				
	Year to Date	This Quarter	For Length of Project	Comments
Number of businesses showing improved performance from USAID-supported practices	9	3	18	Assistance provided to the companies described above in the "Highlights" section
<i>Results tracked additionally to the SO table indicators</i>				

Amount of economic benefit received by local businesses as a result of introducing new biomass energy plant	USD 7.0 ml. per year	USD – 5.65 ml per year	n/a	Igirma-Tairiku will benefit from an additional USD three million per year, Ros DV – USD 0.35 million, and Shelekhovskiy Zavod ZBI - USD 0.3 million from producing higher quality wood products for sale using biomass energy systems.
Number of improved environmental practices adopted in targeted regions (biomass energy facilities installed)	12	3	n/a	Three biomass boilers have been installed in Shelekhovskiy Zavod ZBI and Ros-DV combined; nineteen dry kilns have been installed at Igirma-Tairiku, Ros-DV, and Shelekhovskiy Zavod ZBI combined.
Number of local institutions, with increased capacity to design and construct biomass energy facilities	- 4	2	n/a	Two experts have been trained at partner-company Shelekhovskiy Zavod ZBI to operate two 1.8 MW Italian biomass boilers and an Incomac kiln system.
Number of people, who received training in biomass energy use through biomass energy workshops, design review meetings, study tours, seminars (male/female/total)	170/70/240	55/20/75	n/a	<p>Presentation of biomass energy technology made to 25 participants at a seminar in Ust-Kut of Irkutskaya Oblast held on October 10</p> <p>Presentation on FOREST experience in biomass energy use made to 50 participants at EurAsEC Congress in Moscow on September 22, 2004.</p>

6. Key Deliverables Accomplished Per Approved Workplan

- In accordance with Task I, “Complete 50 MW thermal of biomass energy facilities at pilot sites” subtask ii. “Construction, commission, start-up of biomass facility,” biomass energy facilities were successfully installed and put into operation at two partner-companies – a boiler-dry kiln system at Shelekhovskiy Zavod ZBI (3.6 MW boilers and four -120 m³ each - dry kilns) and a dry kiln system at Igirma-Tairiku (twelve dry kilns - 180 m³ each).
- In accordance with Task IV “Website with fact sheets and case studies” subtask ii “Dissemination of information on the potential use of “Improved Products,” in September 2004, FOREST representative Tatyana Khodos gave presentations at the EurAsEC –Business World International Forum in Moscow and the Biomass Energy seminar in Ust-Kut, Irkutskaya Oblast. The Forum’s presentations will be published as proceedings.

7. Notifications – Issues, Problems, Findings on Work to Date

There is a shortage of technical publications available for the forest industry in the RFE and Siberia on the utilization of biomass wood wastes to generate heat and power. Discussions are ongoing with equipment suppliers (e.g. Weinig, Homag, Griggio) and U.S. forest product industries about the need to disseminate such technical information.